

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

ATTY.'S DOCKET: STRAUB=1


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| In re Application of: |) | Confirmation No.: 7860 |
| |) | |
| Alexander STRAUB |) | Art Unit: 1626 |
| |) | |
| Filing Date: August 1, 2005 |) | Examiner: Joseph R. Kosack |
| |) | |
| U.S. Appln. No.: 10/518,454 |) | Washington, D.C. |
| |) | |
| For: METHOD FOR PRODUCING |) | |
| HETEROCYCLIC FLUOROALKENYL...) |) | |

DECLARATION UNDER 37CFR1.132

Honorable Commissioner for Patents
U.S. Patent and Trademark Office
Customer Service Window
Randolph Building, Mail Stop **Amendment**
401 Dulany Street
Alexandria, VA 22314

Sir:

I, Shlomo Cohen, do hereby declare that I am familiar with the subject application and the claimed method of preparing sulfone by preparing a sulfoxide from a sulfide by reacting a heterocyclic sulfide with a salt of peroxomonosulfuric acid, and then reacting the sulfoxide produced with a salt of peroxomonosulfuric acid to produce a sulfone.

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When conducting the reaction (starting with a sulfide) at an acidic pH (e.g. below 2), with a salt of peroxomonosulfuric acid, the reaction halts resulting in a mixture of a sulfone and sulfoxide, thus, leading to incomplete conversion.


In preparing the sulfone from the sulfoxide, in order to complete the reaction, it is critical that the pH of the reaction be above 6, and preferably from 8 to 9. If the pH is below 6, the reaction does not proceed to termination, resulting in poor yield. By maintaining the pH above 6, the reaction proceeds smoothly to termination under moderate conditions, resulting in high yields and purity of sulfone in a short time.

There is no report in the literature of this oxidation reaction proceeding to completion in two hours under the mild reaction conditions claimed herein, resulting in high yields (and selectivity).

I hereby further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are

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punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

By: 
Shlomo Cohen

Date: 31-March-2009